

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
11 January 2001 (11.01.2001)

PCT

(10) International Publication Number  
**WO 01/01965 A1**

(51) International Patent Classification<sup>7</sup>: **A61K 9/19, 38/25**

(21) International Application Number: PCT/EP00/06061

(22) International Filing Date: 29 June 2000 (29.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
99112421.5 30 June 1999 (30.06.1999) EP

(71) Applicant (for all designated States except US): **APPLIED RESEARCH SYSTEMS ARS HOLDING N.V.**  
[NL/NL]; 15 Pietermaai, Curaçao (AN).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SAMARITANI, Fabrizio** [IT/IT]; Via Luigi Chiala, 130, I-00139 Roma (IT). **DEL RIO, Alessandra** [IT/IT]; Viale Romualdo Chiesa, 15, I-00144 Roma (IT).

(74) Agent: **HASSA, Jürgen**; Serono International S.A., 12, Chemin des Aulx, CH-1228 Plan-Les-Quates (CH).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GRF-CONTAINING LYOPHILIZED PHARMACEUTICAL COMPOSITIONS

(57) Abstract: Human Growth Hormone Releasing Factor (GRF)-containing pharmaceutical compositions are described, more precisely, lyophilized compositions of hGRF stabilized by means of saccharose.

WO 01/01965 A1